CLAIMS

1. (Original) A method of determining interference at a first base station located in a first cell from transceivers operating in a remote cell, said method comprising:

verifying the operation of a first transceiver used to perform signal strength measurements of signals transmitted by transceivers in the remote cell, wherein said verifying comprises:

receiving a signal on a first channel associated with the first base station with the first transceiver;

measuring the signal strength of the signal received on the first channel by the first transceiver;

determining whether the first transceiver is functional by comparing the signal strength measurements of the signal received by the first transceiver to signal strength measurements of corresponding signal received by a second transceiver at the first base station;

after verifying that the first transceiver is operational, receiving signals on a second channel associated with a second base station in the remote cell with the first transceiver;

measuring the signal strength of the signals received by the first transceiver on the second channel; and

determining the interference based on the signal strength of the signals received on the second channel.

2. (Original) The method of claim 1 wherein the first channel is a control channel associated with the first base station.

3. (Original) The method of claim 2 wherein receiving a signal on a channel associated with the first base station comprises receiving an access request on an access channel.

4. (Original) The method of claim 1 wherein receiving signals on second channel associated with a second base station comprises receiving access requests on an access channel associated with the second base station.

5. (Original) The method of claim 1 further comprising taking a predetermined action if the signal strength measurement of the signal received by the first transceiver does not match the signal strength measurement of the corresponding signal received by a second transceiver within predetermined limits .

6. (Original) A method of determining interference at a first base station located in a first cell from transceivers operating in a remote cell, said method comprising:

verifying the operation of a first transceiver used to perform signal strength measurements of signals transmitted by transceivers in the remote cell, wherein said verifying comprises:

listening for an access request on an access channel associated with the first base station with first and second transceivers located at the first base station;

generating an alarm if the second transceiver receives an access request that was not received by first transceiver;

after verifying that the first transceiver is operational, receiving signals on a second channel associated with a remote base station in a remote cell with the first transceiver;

measuring the signal strength of the signals received by the first transceiver on the second channel; and

determining the interference based on the signal strength of the signals received on the second channel.

7. (Original) The method of claim 6 wherein listening for an access request on an access channel associated with the first base station with first and second transceivers located at the first base station comprises listening for a predetermined period of time.

8. (Original) The method of claim 7 further comprising sending a notification if no access request is received during the predetermined time period by either the first or second transceivers.

9. (Original) The method of claim 6 wherein receiving signals on second channel associated with a second base station comprises receiving access requests on an access channel associated with the second base station.

10. (Original) A method of determining interference at a first base station located in a first cell from transceivers operating in a remote cell, said method comprising:

verifying the operation of a first transceiver used to perform signal strength measurements of signals transmitted by transceivers in the remote cell, wherein said verifying comprises:

listening for an access request on a first access channel associated with the first base station with first and second transceivers located at the first base station;

if an access request is received by said first transceiver, measuring the signal strength of the access request received on the first access channel by the first and second transceivers, and comparing the signal strength measurement of the access request received by the first transceiver to the signal strength measurement of the access request received by the second transceiver;

generating an alarm if the signal strength measurement of the access request received by the first transceiver does not match the signal strength measurement of the access request received by the second transceiver, or the second transceiver receives an access request that was not received by first transceiver;

after verifying that the first transceiver is operational, receiving access requests on a second access channel associated with a second base station in the remote cell with the first transceiver;

measuring the signal strength of the access requests received by the first transceiver on the second access channel; and

determining the interference based on the signal strength of the access received on the second channel by the first transceiver.

11. (Original) The method of claim 10 wherein listening for an access request on an access channel associated with the first base station with first and second transceivers located at the first base station comprises listening for a predetermined period of time.

12. (Original) The method of claim 11 further comprising sending a notification if no access request is received during the predetermined time period by either the first or second transceivers.

13. (Original) A method of verifying the operation of a first transceiver at a home base station used to perform signal strength measurements of signals transmitted to a remote base station, said method comprising:

receiving an access request on a control channel associated with the local base station with the first transceiver;

receiving an access request on the control channel associated with the local base station with a second transceiver;

verifying that the first transceiver is functional by comparing the access request received by the first transceiver with the access request received by the second transceiver.

14. (Original) The method of claim 13 wherein comparing the access request received by the first transceiver with the access request received by the second transceiver comprises:

measuring the signal strength of the access request received by the first transceiver;

measuring the signal strength of the access request received by the second transceiver; and

comparing the signal strength measurements of the access request received by the first and second transceivers.

15. (Original) The method of claim 14 further comprising generating an alarm if the signal strength measurements of the access request received by the first and second transceivers do not match within predetermined limits.

16. (Currently Amended) A method of verifying the operation of a first transceiver at a local base station used to perform signal strength measurements of signals transmitted to a remote base station, said method comprising:

receiving signals on a local channel associated with the local base station with the first transceiver;

measuring the signal strength of the signals received on the local channel by the first transceiver;

determining whether the first transceiver is functional by comparing the signal strength measurements of the signals received by the first transceiver to signal strength measurements of corresponding signals received by a second transceiver at said ~~first~~ local base station.

17. (Original) The method of claim 16 further comprising:

tuning the first transceiver to a channel associated with a remote base station; and

receiving signals on the channel associated with the remote base station with the first transceiver.

18. (Original) The method of claim 17 further comprising measuring signal strengths of signals received on the channel associated with remote base station.

19. (Original) The method of claim 18 further comprising determining a carrier to interference ratio based on the signal strength measurements of the signal received on the channel associated with the remote base station.

20. (Original) The method of claim 17 wherein receiving signals on a channel associated with the local base station comprises receiving access requests received on an access channel.

21. (Original) The method of claim 17 wherein receiving signals on a channel associated with the remote base station comprises receiving access requests on an access channel associated with the remote base station.

22. (Original) The method of claim 17 wherein receiving signals on a channel associated with the local base station comprises receiving signals for a predetermined period of time.

23. (Original) The method of claim 17 further comprising generating an alarm if the signal strength measurements of the signals received by the first transceiver do not match the signal strength measurements of corresponding signals received by a second transceiver.

24. (Currently Amended) A method of verifying the operation of a first transceiver at a local base station used to perform signal strength measurements of signals transmitted to a remote base station, said method comprising:

listening for access requests on ~~an access~~ a control channel associated with the local base station with the first transceiver;

generating a first alarm if a second transceiver listening on the control channel receives an access request that was not received by first transceiver.

25. (Original) The method of claim 24 wherein listening for an access request on an access channel associated with the first base station with first and second transceivers located at the first base station comprises listening for a predetermined period of time.

26. (Original) The method of claim 25 further comprising sending a notification if no access request is received during the predetermined time period by either the first or second transceivers.

27. (Original) A base station for a communication network, comprising:

a first transceiver adapted to listen to access requests on a control channel in a remote cell;

a second transceiver adapted to transmit and receive signals on a local control channel associated with said base station; and

a controller to control the operation of the first and second transceivers and to verify the operation of the first transceiver by comparing signal strength measurements of a signal received by said first and second transceivers on the local control channel.

28. (Original) The base station of claim 27 wherein the first transceiver is adapted to measure the signal strength of the access requests transmitted on the control channel in the remote cell.

29. (Original) The base station of claim 27 wherein the controller is operative to generate an alarm if the signal strength measurements of the signals received by the first and second transceivers do not match within predetermined limits.

30. (Original) The base station of claim 27 wherein the controller generates an alarm if the second transceiver receives a signal that is not received by the first transceiver.